VOLUME CONTENTS

Number 1

R. BEST, W. RIVERA, 1 Thermodynamic design data for absorption heat J. HERNÁNDEZ and A. OSKAM pump systems operating on ammonia-sodium thiocyanate-I. Cooling R. BEST, W. RIVERA. 11 Thermodynamic design data for absorption heat J. HERNÁNDEZ and A. OSKAM pump systems operating on ammonia-sodium thiocyanate-II. Heating R. BEST. W. RIVERA. 23 Thermodynamic design data for absorption heat J. HERNÁNDEZ and A. OSKAM pump systems operating on ammonia-sodium thiocyanate-III. Simultaneous cooling and heating M. FATOUH and 33 Comparison of R22-absorbent pairs for vapour S. SRINIVASA MURTHY absorption heat transformers based on P-T-X-H data S. H. WON and Y. H. KANG 49 Thermodynamic analysis and design data for a double-effect absorption heat pump system using four working pairs T. WATANABE, H. KIKUCHI and 57 Enhancement of charging and discharging rates A. KANZAWA in a latent heat storage system by use of PCM with different melting temperatures N. KAYANSAYAN 67 Heat transfer characterization of plate fin-tube heat exchangers V. GOETZ, F. ELIE and B. SPINNER 79 The structure and performance of single effect solid-gas chemical heat pumps I Software Survey Section

Number 2

M. L. MARTINS COSTA and J. A. R. PARISE	97	A three-zone simulation model for air-cooled condensers
H. M. LI, C. Y. LIU and M. DAMODARAN	115	Analytical study of the flow and heat transfer in a rotating heat pipe
M. A. HEIKKINEN, M. J. LAMPINEN and M. TAMASY-BANO	123	Thermodynamic analysis and optimization of the Brayton process in a heat recovery system of paper machines
P. A. PILAVACHI and J. D. ISDALE	133	European Community R&D strategy in the field of heat exchanger fouling: projects
		VII

A. F. DU PREEZ and D. G. KRÖGER	139	tower
F. ZIEGLER and P. RIESCH	147	Absorption cycles. A review with regard to energetic efficiency
снін wu	161	Cooling capacity optimization of a waste heat absorption refrigeration cycle
A. WILLIAMS and M. AKBAR HESSAMI	167	Case Study Two case studies of cogeneration systems design and economic feasibility
	187	Announcement and Call for Papers International Conference on Combined Cycle Power Generation
	1	Software Survey Section

Number 3

B. MOHANTY and G. THAVALINGAM	189	Techno-economic viability of upgrading thermal effluents in industries: application in developing countries
M. ZAHEER-UDDIN	201	Decentralized control schemes for heat recovery systems
S. DEVOTTA and S. GOPICHAND	213	Derived thermodynamic design data for refriger- ation and heat pump systems operating on HCFC-123
J. STRÖMBERG, PÅ. FRANCK and T. BERNTSSON	219	Consequences of recent gas turbine developments for industrial CHP applications
P. NEVEU and J. CASTAING	233	Solid-gas chemical heat pumps: field of appli- cation and performance of the internal heat of reaction recovery process
G. E. WEBER and W. M. WOREK	253	Sliding pressure analysis using the second law
C. D. RAKOPOULOS, E. C. ANDRITSAKIS and D. K. KYRITSIS	261	Availability accumulation and destruction in a DI diesel engine with special reference to the limited cooled case
M. BALAT and B. SPINNER	277	Optimization of a chemical heat pump: energetic density and power
	1	Software Survey Section

Number 4

Solid Sorption Refrigeration and Heat Pumps

F. MEUNIER 287 Editorial F. MEUNIER 289 Solid sorption: an alternative to CFCs J. J. GUILLEMINOT, A. CHOISIER, 297 Heat transfer intensification in fixed bed J. B. CHALFEN, S. NICOLAS and adsorbers J. L. REYMONEY **B. SPINNER** 301 Ammonia-based thermochemical transformers S. SUDA 309 What is required for the commercialization of metal hydride refrigerators and heat pumps S. MAURAN, P. PRADES and 315 Heat and mass transfer in consolidated reacting F. L'HARIDON beds for thermochemical systems 321 The technical challenges for solid desiccant B. SHELPUK cooling P. PICARD 329 Sorption systems: the point of view of a gas utility M. SUZUKI 335 Application of adsorption cooling systems to automobiles M. GROLL 341 Reaction beds for dry sorption machines D. J. MILES, D. M. SANBORN, 347 Gas fired sorption heat pump development G. A. NOWAKOWSKI and S. V. SHELTON S. V. SHELTON 353 Residential space conditioning with solid sorption technology J. A. JONES 363 Sorption refrigeration research at JPL/NASA K. STEPHAN and R. KRAUSS 373 Regulated CFCs and their alternatives I Software Survey Section

Number 5

D. A. REAY

383 Catalytic combustion: current status and implications for energy efficiency in the process industries

P. A. PILAVACHI

391 Process industry heat exchanger R&D with possible implications for aerospace technology

F. Z. SIERRA, R. BEST and
F. A. HOLLAND

401 Experiments on an absorption refrigeration system powered by a solar pond

M. J. LEE, D. L. TIEN and C. T. SHAO	409	Thermophysical capability of ozone-safe working fluids for an organic Rankine cycle system
S. ACEVES-SABORIO	419	Analysis of energy consumption in heat pump and conventional driers
A. M. RADHWAN and G. M. ZAKI	429	Analysis of refrigerant-charged solar collectors with phase change
R. K. WANCHOO	441	Forced convection heat transfer around large two-phase bubbles condensing in an immiscible liquid
E. PEREIRA PARREIRA and J. A. R. PARISE	451	Performance analysis of capacity control devices for heat pump reciprocating compressors
		Review Papers
O. M. AL-RABGHI, M. BEIRUTTY, M. AKYURT, Y. NAJJAR and T. ALP	463	
Y. S. H. NAJJAR, M. AKYURT, O. M. AL-RABGHI and T. ALP	471	Cogeneration with gas turbine engines
	1	Software Survey Section

Number 6 Special Issue: Process Intensification

P. A. PILAVACHI	481	Editorial
T. HEPPENSTALL	483	Assessment of the impact of catalytic surface combustion on heat transfer in a tube
C. RAMSHAW	493	The opportunities for exploiting centrifugal fields
L. R. WEATHERLEY	515	Electrically enhanced mass transfer
A. C. MERCER	539	Process intensification—the U.K. programmes to encourage the development and use of intensified heat exchange equipment and technology
L. L. VASILIEV and V. V. KHROLENOK	547	Heat transfer enhancement with condensation by surface rotation
D. A. REAY	565	Book Review Energy Efficiency in Process Technology edited by P. A. Pilavachi
	1	Software Survey Section
	V	Title Page, Volume Contents and Author Index for Volume 13

